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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,892	07/07/2003	Yoshinori Sakashita	0071/016001	7022

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SMITH PATENT OFFICE
1901 PENNSYLVANIA AVENUE N W
SUITE 200
WASHINGTON, DC 20006

EXAMINER

ADDISU, SARA

ART UNIT PAPER NUMBER

3722

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/612,892

Applicant(s)

SAKASHITA, YOSHINORI

Examiner

Sara Addisu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on July 7, 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date July 7, 2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

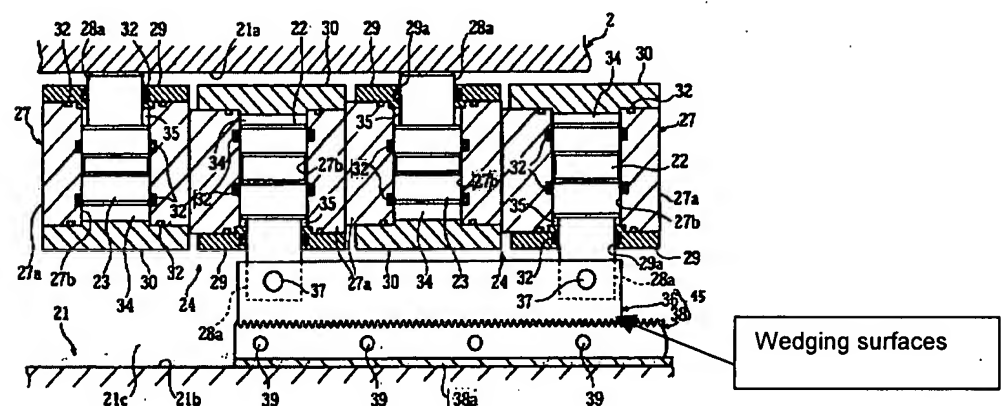
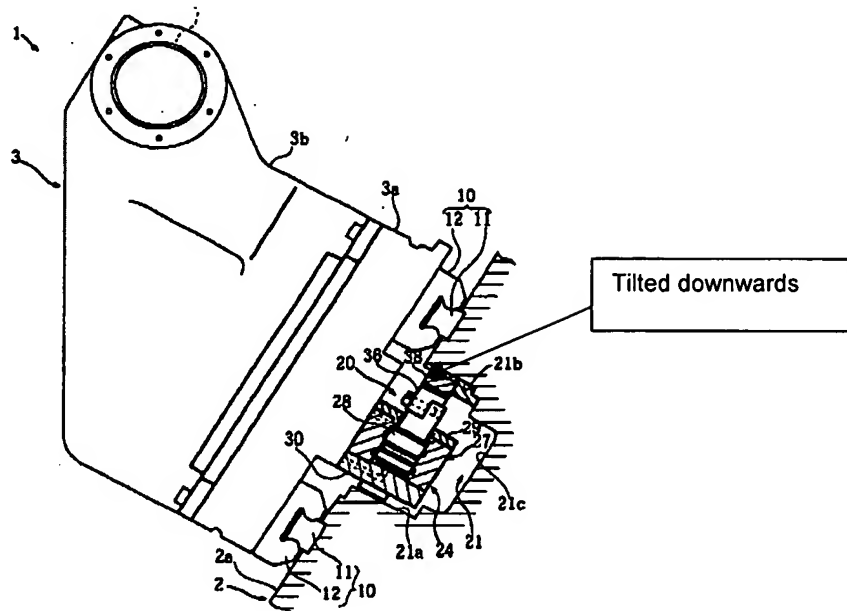
A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, and 4, 6 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakaminami et al. (U.S. Patent No. 6,349,626).

Regarding claim 1, Nakaminami et al. teaches a clamping device (20) comprising a fixed bed (2), a tailstock (movable carriage) (3) (with a movable fitting member) mounted on the fixed bed (2) at a specified position, and a stationary fitting member extending in the direction of movement of the moveable carriage. The fitted members have a wedge surface and are tilted downwardly (as indicated in the diagrams below). Nakaminami et al. also teaches cylinder mechanisms (24) that drive the movable fitting member of the movable carriage between extended and retracted position (Col. 4, lines 19-23) (i.e. movable fitting member is engaged or disengaged with the stationary fitting member) in a direction transverse to the direction of the movement of the movable carriage.

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**Fig. 5**

Regarding claim 2, Nakaminami et al. teaches a movable rack (36) and a fixed rack (38), each having teeth on the fitting surface for the engagement with each other (see figure 5).

Regarding claim 4, Nakaminami et al. teaches an oil cylinder mechanism (24) having a piston-return spring (Col. 4, lines 19-23).

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Regarding claim 6, Nakaminami et al. teaches a rod portion (backup member) (28a) [Col. 4, lines 23-26] for supporting the surface opposite to the wedge surface of the movable fitting member.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaminami (U.S. Patent No. 6,349,626).

Nakaminami teaches cylinder-driving mechanism as set forth in the above rejection (Claim 4) (Col. 4, line 19-23). Nakaminami also teaches a cylinder mechanism having an oil cylinder (Col. 4, lines 40-43).

However, in the first embodiment Nakaminami is silent about the oil cylinder mechanism having a piston-return spring.

In another embodiment of Nakaminami's invention, Nakaminami teaches an oil cylinder mechanism having piston-return springs (Figure 8, Col. 4, lines 53-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize spring tension to return the cylinder

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mechanism of Nakaminami's invention as taught by his second embodiment for the purpose of better performance by preventing pressure loss due to leaks.

Claims 3, 8-10 are rejected, as best understood, under 35 U.S.C. 103(a) as being unpatentable over Nakaminami et al. (U.S. Patent No. 6,349,626), in view of Warner (U.S. Patent No. 4,792,267).

Nakaminami et al. teaches a clamping device for a machine tool as set forth in the above rejections.

Regarding claim 3, Nakaminami et al. teaches a recess portion (21) with inner walls (21a & 21b) (Col. 4, lines 15-16). The stationary rack (38) is securely tightened with a bolt to a bracket (38a) that is securely bolted to the right inner wall (i.e. the stepped portion of the recesses portion) [Col. 4, lines 59-61 & Figure 4).

However, Nakaminami et al. does not teach a screw ball that is disposed in the recess portion of the fixed bed.

Warner teaches a movable carriage structure (12) mounted on a fixed base (14). Warner also teaches a recess in the fixed bed (Figure 1) wherein a ball screw (50) is mounted to. The ball screw is rotatably supported between a motor (54) and bearing (56). Ball screw (50) moves the movable carriage laterally (Figure 2 and Col3. lines 6-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize ball screws to move the tailstock (moving carriage taught by Nakaminami et al.) laterally as taught by Warner for

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the purpose of controlling the lateral movement of the carriage by selected activation of the motor which drives the ball screw (Nakaminami et al., Col. 3, lines 13-15).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara Addisu at 571-272-6082. The examiner can normally be reached on 8:30 am - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sara Addisu
571-272-6082


A. L. WELLINGTON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700